Need for Speed

Veloce Emulation Competition
Sponsored by Mentor Graphics

What is it?
Need for Speed is a competition to recognize outstanding student projects that use Mentor Veloce emulation hardware to realize speed improvements in simulation and modeling.   The first place prize is $5,000. Second place is $3,000 and third place is $1,000.

The competition has been a great opportunity for students to explore emulation ideas in more depth than is possible during an academic class and to hone their skills

Who is eligible?
Teams of between one and four PSU students (undergrad, grad, or recently graduated) are eligible.

What kinds of projects are suitable?
The project must use the Mentor Veloce emulator to accelerate an application to achieve speedup over conventional simulation or other alternatives. Projects might include the design and verification of hardware, acceleration of parallel algorithms, or the simulation of complex phenomena. Projects can use existing designs (e.g. developed for other courses or projects, OpenCore projects, etc).

How do I/we participate?
Teams are encouraged to send an email to tom.schubert@pdx.edu indicating their interest in participating as early as possible. Written proposals are not required, but proposals/progress reports (3-5 pages suggested) received by the first week of July will receive beneficial feedback from Mentor Graphics experts. Also, in addition to receiving coaching from PSU faculty during the summer, in early August, Mentor Graphics experts come to PSU to help teams improve their project and understanding of emulation.

How are projects judged?
A preliminary project report (including a written report, code, and all scripts necessary to reproduce results) must be submitted in early September. A group of finalists will be chosen by the judges and notified by mid September.   Finalists then prepare final reports and short presentation (20-30 minutes) for the final round of judging in early October (tentatively the first Friday).

Criteria for selection include: the degree of project complexity, innovation and results, report quality, project applicability, and (for finalists) presentation quality

Where can I learn more?
Visit the website www.ece.pdx.edu/~schubert/NeedForSpeed or email tom.schubert@pdx.edu
(subject: Need For Speed competition)

Timetable

- Proposals: early July (but see me anytime)
- Coaching Day: early August
- Submission Deadline: first week of September
- First Round Result: mid-September
- Finals: first Friday in October